	United States Environmental Protection Agency Washington, DC 20460 Notice of Arrival of Pesticides and Devices	Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.	OMB Control No. 2070-0020 Approval Expires 11/30/2016
Note: Read Instructions before completing form.			
Part I: To Be Completed by Importer of Record or Licensed Customs Broker			
1. Name and Complete Address of Licensed Customs Broker Expeditors International Attn: Brynn Wisz 849 Thomas Drive Bensenville, IL 60106 T: 630-616-2318		2. Name and Complete Address of Importer of Record Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T: 708-377-1330	
<input checked="" type="checkbox"/> Return Form to this Address		<input type="checkbox"/> Return Form to this Address	
3. Name and Complete Address of Shipper Shaanxi Hengrun Chemical Industry Co., LTD Xiyang Industrial Park, Sanyuan 713807, Shaanxi, P.R. China Tel: 86-29-32598008 86-29-32598911 Fax: 86-29-32598406		4. EPA Registration Number 35935-92	5. EPA Producer Establishment No. 88106-CHN-001
		6. Brand Name of Product Fludioxonil Technical	
7. Active Ingredients and Percentage of Each Fludioxonil 98.0%			
8. Unit Size 25 kg	9. Quantity 40	10. Total Net Weight 1,000 kg	11. Country of Origin China
12. Port of Entry Chicago, IL		13. Name and Complete Address of Carrier CMA CGM Norma	
14. Entry Number 231-6198626-4	15. Anticipated Entry Date 1/4/14		
17. Location of Goods for Examination after Importation Chicago, IL		16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment—see Instructions)	
18. To be Completed for Pesticides without an EPA Registration Number (The following information is optional, but may expedite processing of the Notice of Arrival. Check all that apply and provide additional information as indicated)			
<input type="checkbox"/> 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number _____ EPA Registration Number of Product being Formulated, if applicable: _____			
<input type="checkbox"/> 18c. A pesticide distributed under an Experimental Use Permit. Experimental Use Permit Number: _____			
<input type="checkbox"/> 18d. A pesticide distributed for research and development purposes without an Experimental Use Permit.			
<input type="checkbox"/> 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18f. A pesticide distributed under an emergency exemption. Emergency Exemption Number: _____			
<input type="checkbox"/> 18g. A pesticide transferred for the purposes of disposal.			
<input type="checkbox"/> 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in the Remarks (block 19).			

19. Remarks (Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA).

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law

20. Printed Name of Importer of Record or
Licensed Customs Broker

Susan Wright

Telephone Number

708-377-1363

21. Signature of Importer of Record or Licensed
Customs Broker*Susan Wright*

Date Signed

1/3/14

Part II: To Be Completed by U.S. Environmental Protection Agency

Action to be taken by U.S. Customs and Border Protection



Release Shipment



Detain for Inspection

Release shipment to consignee under bond. Shipment must
be held intact pending inspection.

Other (Specify)

ENTRY # 231-6198626-4

Remarks

Signature and Title of EPA Official

Myhan Dun / Enforcement Officer

Date

1-16-14

Part III: To Be Completed by U.S. Customs and Border Protection

The information shown in Part I was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing shipment and should also be noted in "Remarks."

Remarks

Signature of District Director of Customs

Date

Paperwork Reduction Act Notice: The estimated average time to read the instructions and complete this form is 26 minutes. Send comments regarding the burden estimate or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.

Fludioxonil Technical

FOR MANUFACTURING USE ONLY

ACTIVE INGREDIENT:	98.0%
Fludioxonil	2.0%
OTHER INGREDIENTS:	
TOTAL	100.0%

EPA Reg. No. 35935-92

EPA Est. No. 88106-CHN-001

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

FIRST AID	
IF IN EYES	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is intended for the formulation of fungicide products. This product may be used to formulate products for specific use(s) not listed on the MP

label if the formulator, user group, or grower has complied with the U.S. EPA data submission requirements regarding the support of such use(s).

FOR MANUFACTURING USE ONLY INTO A FUNGICIDE FOR THE FOLLOWING USES:

1. Seed Treatment Uses:

Root and Tuber vegetables, Bulb vegetables, Leafy vegetables, except Brassica vegetables, Brassica (Cole) leafy vegetables, Legume vegetables (succulent or dried), Fruiting vegetables (except cucurbits), Cucurbit vegetables, Cereal grains, Nongrass animal feeds (forage, fodder, straw, and hay), Herbs and Spices, Rape, Cotton, Peanut, Crambe, Flax, Jojoba, Lesquerella, Safflower, and Sunflower.

2. Post Harvest Uses: Citrus fruit group (Crop group 10), Kiwi, Pome fruit group (Crop group 11), Pomegranate, Stone fruit group (Crop group 12), and Sweet potato.

3. Uses for which the US EPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration; and

4. Uses for experimental purposes that are in compliance with US EPA requirements

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Plastic or Paper Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. For rigid, Nonrefillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For rigid nonrefillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Fiber drums with liners: Nonrefillable container. DO NOT reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BYWAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV082412)Rev2
17103000

Made in China

NET WEIGHT: 55.12 lbs. (25 Kg)

Manufactured for
NUFARM LIMITED
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Domestic North America: 800-424-9300
International: 703-527-3887
For Medical Emergencies Only Call 877-325-1840

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Fludioxonil Technical
EPA Reg. No.: 35935-92
Synonyms: 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile
Product Type: Fungicide

Company Name: Nufarm Limited
4020 Aerial Center Parkway
Morrisville, NC 27560

Date of Issue: December 5, 2013
Sections Revised: 1, 3

Supersedes: May 29, 2013

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: Green beige solid odorless powder.

Warning Statements: Caution. Keep out of reach of children. Causes eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:

This product is toxic to fish and aquatic invertebrates.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Fludioxonil	131341-86-1	99.0
Other Ingredients:		1.0

4. FIRST AID MEASURES

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point: Not flammable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: Recommended for large fires: alcohol-resistant foam, dry chemical, water spray, or carbon dioxide. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Toxic, irritating vapors may be formed if product is involved in a fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity:

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE**Handling:**

Personnel handling this product should be thoroughly trained as to its hazards. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Do not ingest. Do not breathe dust or mists. Avoid getting material on clothing. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed. Handle and open container in a manner as to prevent spillage. If the container is leaking or material is spilled for any reason or cause, carefully dispose of as directed for pesticides in Section 13.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage:

Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin wear long-sleeved shirt and long pants, shoes, socks, and chemical resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Fludioxonil	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Green beige solid odorless powder

Boiling Point:	Not applicable	Solubility in Water:	1.8 mg/l (25° C)
Density:	1.49 g/mL	Specific Gravity:	1.54 (20° C)
Evaporation Rate:	Not applicable	Vapor Density:	Not applicable
Freezing Point:	Not applicable	Vapor Pressure:	3.9×10^{-4} mPa (25° C)
Melting Point:	199.8° C	Viscosity:	Not applicable
pH:	8.91		

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**Toxicological Data:**

Data from laboratory studies conducted on Fludioxonil:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >2,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: > 2.6 mg/L

Eye Irritation: Rabbit: Mildly irritating

Skin Irritation: Rabbit: Mildly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to fludioxonil may cause effects in the kidney and liver.

Carcinogenicity / Chronic Health Effects: Fludioxonil did not cause cancer in laboratory animals.

Reproductive Toxicity: In animal studies, Fludioxonil has been shown not to interfere with reproduction.

Developmental Toxicity: Fludioxonil did not cause birth defects in animals.

Genotoxicity: In vitro bacterial assays and animal tests with fludioxonil did not demonstrate mutagenic effects.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Data on Fludioxonil:

Bees LC₅₀ > 25 ug/bee

Invertebrates (Water Flea) LC₅₀ 0.90 ppm

Fish (Trout) LC₅₀ 0.47 ppm

Fish (Bluegill) LC₅₀ 0.74 ppm

Birds (8-day dietary - Bobwhite Quail) LC₅₀ > 5,200 ppm

Birds (8-day dietary - Mallard Duck) LC₅₀ > 5,200 ppm

Environmental Fate:

Fludioxonil, does not bioaccumulate, however it is persistent in soil and is stable in water. It has low mobility in soil. The material sinks in water (after 24 hours).

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling and Disposal:

Plastic or Paper Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Fiber drums with liners: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III

IMDG

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III, Marine Pollutant

IATA

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III)

15. REGULATORY INFORMATION**U.S. Federal Regulations:**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Not listed

Section 313 Toxic Chemical(s):

Not listed.

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Not listed

State Information:

Other state regulations may apply.

California Proposition 65: Not Listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

	United States Environmental Protection Agency Washington, DC 20460 Notice of Arrival of Pesticides and Devices	Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.	OMB Control No. 2070-0020 Approval Expires 11/30/2016
Note: Read Instructions before completing form.			
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<input checked="" type="checkbox"/> Return Form to this Address		<input type="checkbox"/> Return Form to this Address	
3. Name and Complete Address of Shipper Shaanxi Hengrun Chemical Industry Co., LTD Xiyang Industrial Park, Sanyuan 713807, Shaanxi, P.R. China Tel: 86-29-32598008 86-29-32598911 Fax: 86-29-32598406		4. EPA Registration Number 35935-92	5. EPA Producer Establishment No. 88106-CHN-001
		6. Brand Name of Product Fludioxonil Technical	
7. Active Ingredients and Percentage of Each Fludioxonil 98.0%			
8. Unit Size 25 kg	9. Quantity 100	10. Total Net Weight 2,500 kg	11. Country of Origin China
12. Port of Entry Chicago, IL		13. Name and Complete Address of Carrier CMA CGM Orfeo	
14. Entry Number 231-8006460-6	15. Anticipated Entry Date 2/12/14		
17. Location of Goods for Examination after Importation Chicago, IL		16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment—see Instructions)	
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<input type="checkbox"/> 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number _____ EPA Registration Number of Product being Formulated, if applicable: _____			
<input type="checkbox"/> 18c. A pesticide distributed under an Experimental Use Permit. Experimental Use Permit Number: _____			
<input type="checkbox"/> 18d. A pesticide distributed for research and development purposes without an Experimental Use Permit.			
<input type="checkbox"/> 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: _____			
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<input type="checkbox"/> 18g. A pesticide transferred for the purposes of disposal.			
<input type="checkbox"/> 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in the Remarks (block 19).			

19. Remarks (Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA.).

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

20. Printed Name of Importer of Record or Licensed Customs Broker

Susan Wright

Telephone Number

708-377-1363

21. Signature of Importer of Record or Licensed Customs Broker

Susan Wright

Date Signed

2/3/14

Part II: To Be Completed by U.S. Environmental Protection Agency

Action to be taken by U.S. Customs and Border Protection



Release Shipment



Detain for Inspection



Release shipment to consignee under bond. Shipment must be held intact pending inspection.



Other (Specify)

Remarks

ENTRY NO. 231-8006460-8

Signature and Title of EPA Official

John L. Mumtaz

Date

2/5/14

Part III: To Be Completed by U.S. Customs and Border Protection

The information shown in Part I was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing shipment and should also be noted in "Remarks."

Remarks

Signature of District Director of Customs

Date

Paperwork Reduction Act Notice: The estimated average time to read the instructions and complete this form is 26 minutes. Send comments regarding the burden estimate or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.

Fludioxonil Technical

FOR MANUFACTURING USE ONLY

ACTIVE INGREDIENT:

Fludioxonil 98.0%

OTHER INGREDIENTS: 2.0%

TOTAL 100.0%

EPA Reg. No. 35935-92

EPA Est. No. 88106-CHN-001

KEEP OUT OF REACH OF CHILDREN CAUTION

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

FIRST AID	
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is intended for the formulation of fungicide products. This product may be used to formulate products for specific use(s) not listed on the MP

label if the formulator, user group, or grower has complied with the U.S. EPA data submission requirements regarding the support of such use(s).

FOR MANUFACTURING USE ONLY INTO A FUNGICIDE FOR THE FOLLOWING USES:

1. Seed Treatment Uses:

Root and Tuber vegetables, Bulb vegetables, Leafy vegetables, except Brassica vegetables, Brassica (Cole) leafy vegetables, Legume vegetables (succulent or dried), Fruiting vegetables (except cucurbits), Cucurbit vegetables, Cereal grains, Nongrass animal feeds (forage, fodder, straw, and hay), Herbs and Spices, Rape, Cotton, Peanut, Crambe, Flax, Jojoba, Lesquerella, Safflower, and Sunflower.

2. Post Harvest Uses: Citrus fruit group (Crop group 10), Kiwi, Pome fruit group (Crop group 11), Pomegranate, Stone fruit group (Crop group 12), and Sweet potato.

3. Uses for which the US EPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration; and

4. Uses for experimental purposes that are in compliance with US EPA requirements

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Plastic or Paper Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. For rigid, Nonrefillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For rigid nonrefillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Fiber drums with liners: Nonrefillable container. DO NOT reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV082412)Rev2
17103000

Made in China

NET WEIGHT: 55.12 lbs. (25 Kg)

Manufactured for
NUFARM LIMITED
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Domestic North America: 800-424-9300
International: 703-527-3887
For Medical Emergencies Only Call 877-325-1840

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Fludioxonil Technical
EPA Reg. No.: 35935-92
Synonyms: 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile
Product Type: Fungicide

Company Name: Nufarm Limited
11901 South Austin Avenue
Alsip, IL 60803

Date of Issue: May 29, 2013
Sections Revised: 1, 3

Supersedes: November 4, 2011

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: Green beige solid odorless powder.

Warning Statements: Caution. Keep out of reach of children. Causes eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:

This product is toxic to fish and aquatic invertebrates.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Fludioxonil	131341-86-1	≥ 98.0%
Other Ingredients:		2.0%

4. FIRST AID MEASURES

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point: Not flammable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: Recommended for large fires: alcohol-resistant foam, dry chemical, water spray, or carbon dioxide. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Toxic, irritating vapors may be formed if product is involved in a fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity:

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE**Handling:**

Personnel handling this product should be thoroughly trained as to its hazards. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Do not ingest. Do not breathe dust or mists. Avoid getting material on clothing. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed. Handle and open container in a manner as to prevent spillage. If the container is leaking or material is spilled for any reason or cause, carefully dispose of as directed for pesticides in Section 13.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage:

Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin wear long-sleeved shirt and long pants, shoes, socks, and chemical resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Fludioxonil	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Green beige solid odorless powder

Boiling Point:	Not applicable	Solubility in Water:	1.8 mg/l (25° C)
Density:	1.49 g/mL	Specific Gravity:	1.54 (20° C)
Evaporation Rate:	Not applicable	Vapor Density:	Not applicable
Freezing Point:	Not applicable	Vapor Pressure:	3.9×10^{-4} mPa (25° C)
Melting Point:	199.8° C	Viscosity:	Not applicable
pH:	8.91		

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**Toxicological Data:**

Data from laboratory studies conducted on Fludioxonil:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >2,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: > 2.6 mg/L

Eye Irritation: Rabbit: Mildly irritating

Skin Irritation: Rabbit: Mildly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to fludioxonil may cause effects in the kidney and liver.

Carcinogenicity / Chronic Health Effects: Fludioxonil did not cause cancer in laboratory animals.

Reproductive Toxicity: In animal studies, Fludioxonil has been shown not to interfere with reproduction.

Developmental Toxicity: Fludioxonil did not cause birth defects in animals.

Genotoxicity: In vitro bacterial assays and animal tests with fludioxonil did not demonstrate mutagenic effects.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Data on Fludioxonil:

Bees LC₅₀ > 25 ug/bee

Invertebrates (Water Flea) LC₅₀ 0.90 ppm

Fish (Trout) LC₅₀ 0.47 ppm

Fish (Bluegill) LC₅₀ 0.74 ppm

Birds (8-day dietary - Bobwhite Quail) LC₅₀ > 5,200 ppm

Birds (8-day dietary - Mallard Duck) LC₅₀ > 5,200 ppm

Environmental Fate:

Fludioxonil, does not bioaccumulate, however it is persistent in soil and is stable in water. It has low mobility in soil. The material sinks in water (after 24 hours).

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling and Disposal:

Plastic or Paper Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke

Plastic Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Fiber drums with liners: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III

IMDG

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III, Marine Pollutant

IATA

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III)

15. REGULATORY INFORMATION**U.S. Federal Regulations:**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Not listed

Section 313 Toxic Chemical(s):

Not listed.

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Not listed

State Information:

Other state regulations may apply.

California Proposition 65: Not Listed

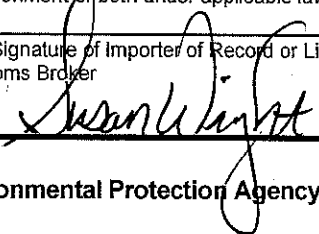

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

	United States Environmental Protection Agency Washington, DC 20460 Notice of Arrival of Pesticides and Devices	Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.	OMB Control No. 2070-0020 Approval Expires 11/30/2016
Note: Read Instructions before completing form.			
Part I: To Be Completed by Importer of Record or Licensed Customs Broker			
1. Name and Complete Address of Licensed Customs Broker Expeditors International Attn: Brynn Wisz 849 Thomas Drive Bensenville, IL 60106 T:630-616-2318		2. Name and Complete Address of Importer of Record Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T: 708-377-1330	
<input checked="" type="checkbox"/> Return Form to this Address		<input type="checkbox"/> Return Form to this Address	
3. Name and Complete Address of Shipper Shaanxi Hengrun Chemical Industry Co., LTD Xiyang Industrial Park, Sanyuan 713807, Shaanxi, P.R. China Tel:86-29-32598008 86-29-32598911 Fax:86-29-32598406		4. EPA Registration Number 35935-92	5. EPA Producer Establishment No. 88106-CHN-001
		6. Brand Name of Product Fludioxonil Technical	
7. Active Ingredients and Percentage of Each Fludioxonil 99.0%			
8. Unit Size 25 kg	9. Quantity 40	10. Total Net Weight 1,000 kg	11. Country of Origin China
12. Port of Entry Chicago, IL		13. Name and Complete Address of Carrier MSC Luciana	
14. Entry Number 231-8013169-4	15. Anticipated Entry Date 3/12/14		
17. Location of Goods for Examination after Importation Nufarm Americas, Inc. 11901 S Austin Ave Alsip, IL 60803 Phone: 708-377-1388		16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment—see Instructions)	
18. To be Completed for Pesticides without an EPA Registration Number (The following information is optional, but may expedite processing of the Notice of Arrival. Check all that apply and provide additional information as indicated)			
<input type="checkbox"/> 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number _____ EPA Registration Number of Product being Formulated, if applicable: _____			
<input type="checkbox"/> 18c. A pesticide distributed under an Experimental Use Permit. Experimental Use Permit Number: _____			
<input type="checkbox"/> 18d. A pesticide distributed for research and development purposes without an Experimental Use Permit.			
<input type="checkbox"/> 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18f. A pesticide distributed under an emergency exemption. Emergency Exemption Number: _____			
<input type="checkbox"/> 18g. A pesticide transferred for the purposes of disposal.			
<input type="checkbox"/> 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in the Remarks (block 19).			

19. Remarks (Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA.).			
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment of both under applicable law			
20. Printed Name of Importer of Record or Licensed Customs Broker Susan Wright	Telephone Number 708-377-1363	21. Signature of Importer of Record or Licensed Customs Broker 	Date Signed 3/5/14
Part II: To Be Completed by U.S. Environmental Protection Agency			
Action to be taken by U.S. Customs and Border Protection			
<input checked="" type="checkbox"/> Release Shipment <input type="checkbox"/> Detain for Inspection <input type="checkbox"/> Release shipment to consignee under bond. Shipment must be held intact pending inspection.			
<input type="checkbox"/> Other (Specify) ENTRY NO. 231-8013169-4			
Remarks			
Signature and Title of EPA Official 			Date 3/10/14
Part III: To Be Completed by U.S. Customs and Border Protection			
The information shown in Part I was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing shipment and should also be noted in "Remarks."			
Remarks			
Signature of District Director of Customs			Date
Paperwork Reduction Act Notice: The estimated average time to read the instructions and complete this form is 26 minutes. Send comments regarding the burden estimate or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.			

Fludioxonil Technical

FOR MANUFACTURING USE ONLY

ACTIVE INGREDIENT: Fludioxonil 99.0%
OTHER INGREDIENTS: 1.0%
TOTAL 100.0%

EPA Reg. No. 35935-92

EPA Est. No. 88106-CHN-001

KEEP OUT OF REACH OF CHILDREN CAUTION

For Chemical Spill, Leak, Fire, or Exposure,
Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

FIRST AID	
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• DO NOT induce vomiting unless told to do so by a poison control center or doctor.• DO NOT give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. DO NOT discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is intended for the formulation of fungicide products. This product may be used to formulate products for specific use(s) not listed on the MP

label if the formulator, user group, or grower has complied with the U.S. EPA data submission requirements regarding the support of such use(s).

FOR MANUFACTURING USE ONLY INTO A FUNGICIDE FOR THE FOLLOWING USES:

1. Seed Treatment Uses:

Root and Tuber vegetables, Bulb vegetables, Leafy vegetables, except Brassica vegetables, Brassica (Cole) leafy vegetables, Legume vegetables (succulent or dried), Fruiting vegetables (except cucurbits), Cucurbit vegetables, Cereal grains, Nongrass animal feeds (forage, fodder, straw, and hay), Herbs and Spices, Rape, Cotton, Peanut, Crambe, Flax, Jojoba, Lesquerella, Safflower, and Sunflower.

2. Post Harvest Uses: Citrus fruit group (Crop group 10), Kiwi, Pome fruit group (Crop group 11), Pomegranate, Stone fruit group (Crop group 12), and Sweet potato.

3. Uses for which the US EPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration; and

4. Uses for experimental purposes that are in compliance with US EPA requirements

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Always use original container to store pesticides in a cool, dry secured warehouse or storage building. DO NOT store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Plastic or Paper Bags: Nonrefillable container. DO NOT reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Containers: Nonrefillable container. DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. For rigid, Nonrefillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For rigid nonrefillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Fiber drums with liners: Nonrefillable container. DO NOT reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BYWAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR ARISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV120313)

MADE IN CHINA

NET WEIGHT: 55.12 lbs. (25 Kg)

Manufactured for
NUFARM LIMITED
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Domestic North America: 800-424-9300
International: 703-527-3887
For Medical Emergencies Only Call 877-325-1840

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Fludioxonil Technical
EPA Reg. No.: 35935-92
Synonyms: 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile
Product Type: Fungicide

Company Name: Nufarm Limited
4020 Aerial Center Parkway
Morrisville, NC 27560

Date of Issue: December 5, 2013
Sections Revised: 1, 3

Supersedes: May 29, 2013

2. HAZARDS IDENTIFICATION**Emergency Overview:**

Appearance and Odor: Green beige solid odorless powder.

Warning Statements: Caution. Keep out of reach of children. Causes eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:

This product is toxic to fish and aquatic invertebrates.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Fludioxonil	131341-86-1	99.0
Other Ingredients:		1.0

4. FIRST AID MEASURES

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point: Not flammable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: Recommended for large fires: alcohol-resistant foam, dry chemical, water spray, or carbon dioxide. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Toxic, irritating vapors may be formed if product is involved in a fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity:

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Personnel handling this product should be thoroughly trained as to its hazards. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Do not ingest. Do not breathe dust or mists. Avoid getting material on clothing. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed. Handle and open container in a manner as to prevent spillage. If the container is leaking or material is spilled for any reason or cause, carefully dispose of as directed for pesticides in Section 13.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage:

Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin wear long-sleeved shirt and long pants, shoes, socks, and chemical resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Fludioxonil	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Green beige solid odorless powder

Boiling Point:	Not applicable	Solubility in Water:	1.8 mg/l (25° C)
Density:	1.49 g/mL	Specific Gravity:	1.54 (20° C)
Evaporation Rate:	Not applicable	Vapor Density:	Not applicable
Freezing Point:	Not applicable	Vapor Pressure:	3.9×10^{-4} mPa (25° C)
Melting Point:	199.8° C	Viscosity:	Not applicable
pH:	8.91		

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**Toxicological Data:**

Data from laboratory studies conducted on Fludioxonil:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >2,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: > 2.6 mg/L

Eye Irritation: Rabbit: Mildly irritating

Skin Irritation: Rabbit: Mildly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to fludioxonil may cause effects in the kidney and liver.

Carcinogenicity / Chronic Health Effects: Fludioxonil did not cause cancer in laboratory animals.

Reproductive Toxicity: In animal studies, Fludioxonil has been shown not to interfere with reproduction.

Developmental Toxicity: Fludioxonil did not cause birth defects in animals.

Genotoxicity: In vitro bacterial assays and animal tests with fludioxonil did not demonstrate mutagenic effects.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Data on Fludioxonil:

Bees LC₅₀ > 25 ug/bee

Invertebrates (Water Flea) LC₅₀ 0.90 ppm

Fish (Trout) LC₅₀ 0.47 ppm

Fish (Bluegill) LC₅₀ 0.74 ppm

Birds (8-day dietary - Bobwhite Quail) LC₅₀ > 5,200 ppm

Birds (8-day dietary - Mallard Duck) LC₅₀ > 5,200 ppm

Environmental Fate:

Fludioxonil, does not bioaccumulate, however it is persistent in soil and is stable in water. It has low mobility in soil. The material sinks in water (after 24 hours).

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling and Disposal:

Plastic or Paper Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke

Plastic Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Fiber drums with liners: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III

IMDG

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III, Marine Pollutant

IATA

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III)

15. REGULATORY INFORMATION**U.S. Federal Regulations:**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Not listed

Section 313 Toxic Chemical(s):

Not listed.

MATERIAL SAFETY DATA SHEET

Fludioxonil Technical

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Not listed

State Information:

Other state regulations may apply.

California Proposition 65: Not Listed

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

	United States Environmental Protection Agency Washington, DC 20460 Notice of Arrival of Pesticides and Devices	Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.	OMB Control No. 2070-0020 Approval Expires 11/30/2016
Note: Read Instructions before completing form.			
Part I: To Be Completed by Importer of Record or Licensed Customs Broker			
1. Name and Complete Address of Licensed Customs Broker Expeditors International Attn: Brynn Wisz 849 Thomas Drive Bensenville, IL 60106 T:630-616-2318		2. Name and Complete Address of Importer of Record Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T: 708-377-1330	
<input checked="" type="checkbox"/> Return Form to this Address		<input type="checkbox"/> Return Form to this Address	
3. Name and Complete Address of Shipper Shaanxi Hengrun Chemical Industry Co., LTD Xiyang Industrial Park, Sanyuan 713807, Shaanxi, P.R. China Tel:86-29-32598008 86-29-32598911 Fax:86-29-32598406		4. EPA Registration Number 35935-92	5. EPA Producer Establishment No. 88106-CHN-001
		6. Brand Name of Product Fludioxonil Technical	
7. Active Ingredients and Percentage of Each Fludioxonil 99.0%			
8. Unit Size 25 kg	9. Quantity 140	10. Total Net Weight 3,500 kg	11. Country of Origin China
12. Port of Entry Chicago, IL		13. Name and Complete Address of Carrier MSC Ivana	
14. Entry Number 231-8022665-0	15. Anticipated Entry Date 04/25/14		
17. Location of Goods for Examination after Importation Nufarm Americas, Inc. 11901 S Austin Ave Alsip, IL 60803 Phone: 708-377-1388		16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6, 7 are not entitled to CBI treatment—see Instructions)	
18. To be Completed for Pesticides without an EPA Registration Number (The following information is optional, but may expedite processing of the Notice of Arrival. Check all that apply and provide additional information as indicated)			
<input type="checkbox"/> 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number _____ EPA Registration Number of Product being Formulated, if applicable: _____			
<input type="checkbox"/> 18c. A pesticide distributed under an Experimental Use Permit. Experimental Use Permit Number: _____			
<input type="checkbox"/> 18d. A pesticide distributed for research and development purposes without an Experimental Use Permit.			
<input type="checkbox"/> 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: _____			
<input type="checkbox"/> 18f. A pesticide distributed under an emergency exemption. Emergency Exemption Number: _____			
<input type="checkbox"/> 18g. A pesticide transferred for the purposes of disposal.			
<input type="checkbox"/> 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in the Remarks (block 19).			

19. Remarks (Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA.).

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law

20. Printed Name of Importer of Record or
Licensed Customs Broker

Telephone Number

708-757-2904

21. Signature of Importer of Record or Licensed
Customs Broker

Vic Sweetwood

Date Signed

4-21-14

Part II: To Be Completed by U.S. Environmental Protection Agency

Action to be taken by U.S. Customs and Border Protection



Release Shipment



Detain for Inspection



Release shipment to consignee under bond. Shipment must be held intact pending inspection.



Other (Specify)

ENTRY NO. 231-802265-0

Remarks

Signature and Title of EPA Official

Charles M. Thompson

Date

4/23/14

Part III: To Be Completed by U.S. Customs and Border Protection

The information shown in Part II was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing shipment and should also be noted in "Remarks."

Remarks

Signature of District Director of Customs

Date

Paperwork Reduction Act Notice: The estimated average time to read the instructions and complete this form is 26 minutes. Send comments regarding the burden estimate or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.

Fludioxonil Technical

FOR MANUFACTURING USE ONLY

ACTIVE INGREDIENT:

Fludioxonil	99.0%
OTHER INGREDIENTS:	1.0%
TOTAL	100.0%

EPA Reg. No. 35935-92

EPA Est. No. 88106-CHN-001

KEEP OUT OF REACH OF CHILDREN CAUTION

For Chemical Spill, Leak, Fire, or Exposure,
Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

FIRST AID	
IF IN EYES	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• DO NOT induce vomiting unless told to do so by a poison control center or doctor.• DO NOT give anything by mouth to an unconscious person.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. DO NOT discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is intended for the formulation of fungicide products. This product may be used to formulate products for specific use(s) not listed on the MP

label if the formulator, user group, or grower has complied with the U.S. EPA data submission requirements regarding the support of such use(s).

FOR MANUFACTURING USE ONLY INTO A FUNGICIDE FOR THE FOLLOWING USES:

1. Seed Treatment Uses:

Root and Tuber vegetables, Bulb vegetables, Leafy vegetables, except Brassica vegetables, Brassica (Cole) leafy vegetables, Legume vegetables (succulent or dried), Fruiting vegetables (except cucurbits), Cucurbit vegetables, Cereal grains, Nongrass animal feeds (forage, fodder, straw, and hay), Herbs and Spices, Rape, Cotton, Peanut, Crambe, Flax, Jojoba, Lesquerella, Safflower, and Sunflower.

2. Post Harvest Uses: Citrus fruit group (Crop group 10), Kiwi, Pome fruit group (Crop group 11), Pomegranate, Stone fruit group (Crop group 12), and Sweet potato.

3. Uses for which the US EPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration; and

4. Uses for experimental purposes that are in compliance with US EPA requirements

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Always use original container to store pesticides in a cool, dry secured warehouse or storage building. DO NOT store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Plastic or Paper Bags: Nonrefillable container. DO NOT reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Containers: Nonrefillable container. DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. For rigid, Nonrefillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For rigid nonrefillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs) Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Fiber drums with liners: Nonrefillable container. DO NOT reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BYWAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV120313)

MADE IN CHINA

NET WEIGHT: 55.12 lbs. (25 Kg)

Manufactured for
NUFARM LIMITED
4020 Aerial Center Parkway, Suite 101
Morrisville, NC 27560





For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Domestic North America: 800-424-9300
International: 703-527-3887
For Medical Emergencies Only Call 877-325-1840

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Fludioxonil Technical
EPA Reg. No.: 35935-92
Synonyms: 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile
Product Type: Fungicide

Company Name: Nufarm Limited
4020 Aerial Center Parkway
Morrisville, NC 27560

Date of Issue: December 5, 2013
Sections Revised: 1, 3

Supersedes: May 29, 2013

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: Green beige solid odorless powder.

Warning Statements: Caution. Keep out of reach of children. Causes eye irritation. Avoid contact with eyes, skin, or clothing. Avoid breathing dust.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:

This product is toxic to fish and aquatic invertebrates.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Fludioxonil	131341-86-1	99.0
Other Ingredients:		1.0

4. FIRST AID MEASURES

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point: Not flammable

Autoignition Temperature: Not applicable

Flammability Limits: Not applicable

Extinguishing Media: Recommended for large fires: alcohol-resistant foam, dry chemical, water spray, or carbon dioxide. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Toxic, irritating vapors may be formed if product is involved in a fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity:

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE**Handling:**

Personnel handling this product should be thoroughly trained as to its hazards. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Do not ingest. Do not breathe dust or mists. Avoid getting material on clothing. Use handling, storage and disposal procedures that will prevent contamination of water, food or feed. Handle and open container in a manner as to prevent spillage. If the container is leaking or material is spilled for any reason or cause, carefully dispose of as directed for pesticides in Section 13.

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage:

Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin wear long-sleeved shirt and long pants, shoes, socks, and chemical resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Fludioxonil	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Green beige solid odorless powder			
Boiling Point:	Not applicable	Solubility in Water:	1.8 mg/l (25° C)
Density:	1.49 g/mL	Specific Gravity:	1.54 (20° C)
Evaporation Rate:	Not applicable	Vapor Density:	Not applicable
Freezing Point:	Not applicable	Vapor Pressure:	3.9×10^{-4} mPa (25° C)
Melting Point:	199.8° C	Viscosity:	Not applicable
pH:	8.91		

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION**Toxicological Data:**

Data from laboratory studies conducted on Fludioxonil:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >2,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: > 2.6 mg/L

Eye Irritation: Rabbit: Mildly irritating

Skin Irritation: Rabbit: Mildly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to fludioxonil may cause effects in the kidney and liver.

Carcinogenicity / Chronic Health Effects: Fludioxonil did not cause cancer in laboratory animals.

Reproductive Toxicity: In animal studies, Fludioxonil has been shown not to interfere with reproduction.

Developmental Toxicity: Fludioxonil did not cause birth defects in animals.

Genotoxicity: In vitro bacterial assays and animal tests with fludioxonil did not demonstrate mutagenic effects.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Data on Fludioxonil:

Bees LC₅₀ > 25 ug/bee

Invertebrates (Water Flea) LC₅₀ 0.90 ppm

Fish (Trout) LC₅₀ 0.47 ppm

Fish (Bluegill) LC₅₀ 0.74 ppm

Birds (8-day dietary - Bobwhite Quail) LC₅₀ > 5,200 ppm

Birds (8-day dietary - Mallard Duck) LC₅₀ > 5,200 ppm

Environmental Fate:

Fludioxonil, does not bioaccumulate, however it is persistent in soil and is stable in water. It has low mobility in soil. The material sinks in water (after 24 hours).

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method:**

Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling and Disposal:

Plastic or Paper Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Plastic Containers: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Fiber drums with liners: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III

IMDG

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III, Marine Pollutant

IATA

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III)

15. REGULATORY INFORMATION**U.S. Federal Regulations:**

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Not listed

Section 313 Toxic Chemical(s):

Not listed.

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Not listed

State Information:

Other state regulations may apply.

California Proposition 65: Not Listed**16. OTHER INFORMATION**

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.



United States
ENVIRONMENTAL PROTECTION AGENCY

OMB Control No. 2070-0020
Expires on 11/30/2016

Washington, DC 20460

Notice of Arrival of Pesticides and Devices

Send Completed Form to Appropriate Regional Office Listed in the Instructions for this Form.

Note: Read Instructions before completing form.

Part 1: To Be Completed by Importer of record or Licensed Customs Broker

1. Name and Complete Address of Licenced Customs Broker			2. Name and Complete Address of Importer of Record	
Expeditors International Attn: Brynn Wisz 849 Thomas Drive Bensenville, IL 60106 T:630-616-2318			Nufarm Americas Inc. 11901 South Austin Avenue Alsip, IL 60803 T: 708-377-1330	
<input checked="" type="checkbox"/> Return Form to this Address			<input type="checkbox"/> Return to this Address	
3. Name and Complete Address of Shipper			4. EPA Registration Number	5. EPA Producer Establishment No.
Nutrichem Co., LTD Building D-1, No. 66 Xixiaokou Road Haidian District, Beijing 100192, P.R. China 110108777062155			35935-92	88106-CHN-001
			6. Brand Name of Product	
			Fludioxonil Technical	
7. Active Ingredients and Percentage of Each				
Fludioxonil 99.0%				
8. Unit Size	9. Quantity	10. Total Net Weight	11. Country of Origin	
25 Kg Cartons	40	1,000 Kg	China	
12. Port of Entry			13. Name and Complete Address of Carrier	
Chicago Illinois			AIR CHINA CARGO ON BOARD: AMERICAN AIRLINES FLIGHT AA186 AIR WAYBILL NUMBER 001-10014185	
14. Entry Number	15. Anticipated Entry Date			
231-8075156-6	October 19, 2014			
17. Location of Goods for Examination after Importation			16. I assert that information constituting Confidential Business Information is shown in the above blocks numbered: (Note: Blocks 4, 5, 6 and 7 are not entitled to CBI treatment—see instructions.)	
Nufarm Americas, Inc. 11901 S Austin Ave Alsip, IL 60803 Phone: 708-377-1388				
18. [Optional] For pesticides without an EPA Registration No., select all that apply: (The following information may expedite the processing of the Notice of Arrival.)				
<input type="checkbox"/> 18a. A pesticide transferred between registered establishments operated by the same producer. Domestic Producer Establishment Number: _____				
<input type="checkbox"/> 18b. A pesticide transferred between registered establishments not operated by the same producer. Domestic Producer Establishment Number: _____ EPA Registration Number of Product being Formulated, if applicable: _____				
<input type="checkbox"/> 18c. A pesticide distributed under an Experimental Use Permit. Experimental Use Permit Number: _____				

EPA Registration Number: 35935-92	Product Name: Fludioxonil Technical
Total Net Weight: 1,000 Kg	Entry Number: 231-8075156-6

☐ 18d. A Pesticide distributed for research and development purposes without an Experimental Use Permit.

☐ 18e. A pesticide transferred solely for export. Domestic Producer Establishment Number: _____

☐ 18f. A pesticide distributed under an emergency exemption. Emergency Exemption Number: _____

☐ 18g. A pesticide transferred for the purposes of disposal.

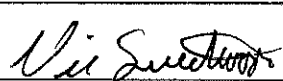
☐ 18h. Other. Provide an explanation including the intended use and a description of why the product is being imported into the United States in Block 19 -- Remarks.

19. Remarks. Provide additional information here. It is recommended that a copy of the label affixed to the product be submitted with the NOA.

AIR WAYBILL NUMBER 001-10014185

Certification

I certify that the statements I made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

20. Printed Name of Importer of Record or Licensed Customs Broker	Vic Sweetwood	Telephone No.: 708-757-2904
21. Signature of Importer of Record or Licensed Customs Broker:		Date: October 17, 2014

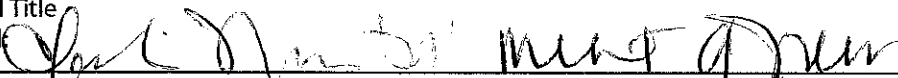
Part II: To Be Completed by U.S. Environmental Protection Agency

Action to be taken by U.S. Customs and Border Protection:

☒ Release Shipment ☐ Detain for inspection ☐ Release shipment to consignee under bond. Shipment must be held intact pending inspection.

☐ Other. (Specify)

Remarks:

Signature and Title of EPA Official: 	Date: 10/22/14
---	----------------

Part III: To Be Completed by U.S. Customs and Border Protection

The information shown in Part I was compared with the entry papers for this shipment and no discrepancies were noted. The shipment was handled as instructed by EPA in Part II. Any deviations should be brought to the attention of EPA before releasing the shipment and should be noted in "Remarks."

Remarks:

Signature of District Director of Customs:	Date:
--	-------

Paperwork Reduction Act Notice: The estimated average time to read the instructions and complete this form is 26 minutes. Send comments regarding the burden estimates or any other aspect of this collection of information to: Director, Collection Strategies Division, Office of Environmental Information (OEI), U.S. Environmental Protection Agency (Mail Code 2822), 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include OMB number 2070-0020 in any correspondence.

FLUDIOXONIL TECHNICAL

For Manufacturing Use Only

ACTIVE INGREDIENT:

Fludioxonil..... 99.0%

OTHER INGREDIENTS:..... 1.0%

TOTAL:..... 100.0%

EPA REG. NO. 35935-92

EPA EST. NO.88106-CHN-001

KEEP OUT OF REACH OF CHILDREN

CAUTION

SEE BELOW FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

FIRST AID

IF IN EYES	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none">Take off contaminated clothing.Rinse skin immediately with plenty of water for 15 to 20 minutes.Call a poison control center or doctor for treatment advice.
IF INHALED	<ul style="list-style-type: none">Move person to fresh air.If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">Call a poison control center or doctor immediately for treatment advice.Have person sip a glass of water if able to swallow.Do not induce vomiting unless told to do so by the poison control center or doctor.Do not give anything by mouth to an unconscious person.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is intended for the formulation of fungicide products. This product may be used to formulate products for specific use(s) not listed on the MP label if the formulator, user group, or grower has complied with the U.S. EPA data submission requirements regarding the support of such use(s).

FOR MANUFACTURING USE ONLY INTO A FUNGICIDE FOR THE FOLLOWING USES:

- Seed Treatment Uses:** Root and Tuber vegetables, Bulb vegetables, Leafy vegetables, except Brassica vegetables, Brassica (Cole) leafy vegetables, Legume vegetables (succulent or dried), Fruiting vegetables (except cucurbits), Cucurbit vegetables, Cereal grains, Nongrass animal feeds (forage, fodder, straw, and hay), Herbs and Spices, Rape, Cotton, Peanut, Crambe, Flax, Jojoba, Lesquerella, Safflower, and Sunflower.
- Post Harvest Uses:** Citrus fruit group (Crop group 10), Kiwi, Pome fruit group (Crop group 11), Pomegranate, Stone fruit group (Crop group 12), and Sweet potato.
- Uses for which the US EPA has accepted the required data and/or citations of data that the formulator has submitted in support of registration; and**
- Uses for experimental purposes that are in compliance with US EPA requirements**

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Always use original container to store pesticides in a cool, dry secured warehouse or storage building. DO NOT store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use.

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

WARRANTY DISCLAIMER AND LIMITATION OF LIABILITY

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV030714)

17103000

NET WEIGHT: 55 LBS (25 KG)

Manufactured For
NUFARM LTD.
4020 Aerial Center Parkway
Morrisville, NC 27560



**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Fludioxonil Technical
EPA Reg. No.: 35935-92
Product Type: Fungicide - For Manufacturing Use Only
Company Name: Nufarm Limited.
4020 Aerial Center Parkway
Morrisville, NC 27560
1-800-345-3330

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300
For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION**PHYSICAL HAZARDS:**

May form combustible dust concentrations in air during processing.

HEALTH HAZARDS:

Acute toxicity, inhalation	Category 4
Sensitization, respiratory	Category 1
Specific target organ toxicity – Repeated exposure,	Category 2

ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute	Category 1
Hazardous to aquatic environment, chronic	Category 1

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Harmful if inhaled. May cause damage to organs (liver, kidney) through prolonged or repeated exposure. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS**

Avoid breathing dust. Use only outdoors or in a well-ventilated area. Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Do not breathe dust. Respiratory protection not normally required. If dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides. Get medical advice/attention if you feel unwell.

Do not breathe dust/fume/gas/mist/vapors/spray. Get medical advice/attention if you feel unwell.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	% BY WEIGHT
Fludioxonil	131341-86-1	99.0
Other Ingredients		1.0
Synonyms: 4-(2,2-difluoro-1,3-benzodioxol-4-yl)-1H-pyrrole-3-carbonitrile		

4. FIRST AID MEASURES

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Recommended for large fires: alcohol-resistant foam, dry chemical, water spray, or carbon dioxide. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Toxic, irritating vapors may be formed if product is involved in a fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, is a potential dust explosion hazard. If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Avoid creation of dusty conditions. If dry, sweep or scoop up material and place into container for disposal. If wet, pump any free liquid into an appropriate closed container. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

HANDLING:

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Avoid contact with eyes, skin or clothing. Avoid breathing dust. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE:

Always use original container to store pesticides in a cool, dry secured warehouse or storage building. Do not store near food and feed. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin wear long-sleeved shirt and long pants, shoes, socks, and chemical resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If dusts exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Fludioxonil	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Green-beige to faintly yellow solid powder
Odor:	Odorless
Odor threshold:	No data available
pH:	6-8
Melting point/freezing point:	199.8 - 202° C
Initial boiling point and boiling range	No data available
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	3.9 x 10 ⁻⁴ mPa (25° C)
Vapor density:	No data available

SAFETY DATA SHEET

Fludioxonil Technical

Relative density:	1.49 @ 20° C
Solubility(ies):	1.8 mg/L @ 25° C
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Keep away from heat, sparks and open flame. Minimize dust generate and accumulation.

Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride, hydrogen fluoride, oxides and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Likely Routes of Exposure: Inhalation, ingestion, eye and skin contact.

Eye Contact: May cause slight eye irritation.

Skin Contact: Is not irritating to the skin.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled.

Medical Conditions Aggravated by Exposure: Inhalation of this product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

Toxicological Data:

Data from laboratory studies conducted on Fludioxonil Technical:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rabbit LD₅₀: >2,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: > 2.6 mg/L

Eye Irritation: Rabbit: Slightly irritating

Skin Irritation: Rabbit: Non irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to fludioxonil may cause effects in the kidney and liver.

Carcinogenicity / Chronic Health Effects: Fludioxonil did not cause cancer in laboratory animals. EPA has classified fludioxonil as a Group D chemical – not classifiable as to human carcinogenicity.

Reproductive Toxicity: In animal studies, Fludioxonil has been shown not to interfere with reproduction.

Developmental Toxicity: Fludioxonil did not cause birth defects in animals.

Genotoxicity: In vitro bacterial assays and animal tests with fludioxonil did not demonstrate mutagenic effects.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Environmental Hazards:

This product is toxic to fish and aquatic invertebrates.

Ecotoxicity:

Data on Fludioxonil Technical:

Bluegill 96-hour LC ₅₀ :	0.74 ppm	Bobwhite Quail Oral LD ₅₀ :	>5,200 ppm
Rainbow Trout 96-hour LC ₅₀ :	0.47 ppm	Mallard Duck 8-day Dietary LC ₅₀ :	>5,200 ppm
Daphnia 48-hour EC ₅₀ :	0.90 ppm	Honey Bee Oral LD ₅₀ :	> 25 µg/bee

SAFETY DATA SHEET

Fludioxonil Technical

Environmental Fate:

Fludioxonil, does not bioaccumulate, however it is persistent in soil and is stable in water. It has low mobility in soil. The material sinks in water (after 24 hours).

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Open dumping is prohibited. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling and Disposal:

Bags: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into manufacturing equipment. Offer for recycling if available or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Fiber drums: Nonrefillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping both sides and bottom to loosen clinging particles. Empty residue into manufacturing equipment. Then offer fiber drum and liner for recycling, if available.

Plastic Drums: Nonrefillable Container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling, if available, or puncture and dispose of in an approved sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse containers with capacities equal to or less than 5 gallons or 50 lbs as follows: Empty the remaining contents in application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers with capacities greater than 5 gallons or 50 lbs as follows: Empty the remaining contents into manufacturing equipment. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into manufacturing equipment, or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into manufacturing equipment and drain for 10 seconds after the flow begins to drip. Hold container upside down over manufacturing equipment, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this SDS.

DOT

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III

IMDG

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III, Marine Pollutant

IATA

UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Fludioxonil), 9, PG III)

15. REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION. Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

SAFETY DATA SHEET

Fludioxonil Technical

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Not listed

Section 313 Toxic Chemical(s):

None

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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